A contribution to the knowledge of African and Oriental Clytrinae

(Coleoptera - Chrysomelidae)

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In the present puper I describe new species of African and Oriental Clytrinae from the collection of the Museum G. Frey, which were amiably forwarded to me by Dr. G. Scherer. Holotypes (except *Smaragdina potanini*) and paratypes are in the Museum G. Frey, duplicate paratypes are in the author's collection (Zoological Institute, Leningrad).

Also a group of genera of African Clytrinae was revised with the purpose to work out the natural system for this subfamily.

A. Descriptions of new species.

Melitonoma variolosa L. Medvedev, sp. nov.

Body black, prothorax reddish fulvous, a small round spot opposite scutellum and a rather large spot on each side of a basal margin are black; sometimes all these spots are connected; elytra flavous with variable black spots; there are usually 6 spots, forming three transverse rows (2,2,2), but humeral spot is very often connected with the outer spot of the second row; very small spot near scutellum usually free or absent at all, spots of second and third rows very often connected, forming transverse bands, or elytra black with narrow lateral margin and apical part fulvous (fig. 1). Legs black with tibiae, except extreme apex, fulvous.

Head sparsely pubescent, frons punctured, anterior margin of clypeus slightly emarginate, in male more wide, but not modificate. Mandibles rather short, with long acute apical tooth, especially on the left mandible and with a blunt low tubercle on the outer side of base, more distinct in male. Prothorax shining, with a few scattered punctures on disc. Elytra shining, distinctly but not deeply punctured.

Fore legs of male are elongate, tibiae 1,2 times as long as femora, slightly curved, tarsi a little shorter as compared with tibiae, with the first two joints equal and elongate.

Aedeagus (fig. 2) distinctly widened apically, its ventral surface shining, with two indistinct lateral grooves before apex. Length of body: male-4, 7-5,3 mm, female -5,2 mm.

South Africa, Johannesburg, leg. Zumpt, XI. 1952-6 males (holotype and paratypes), X-XII. 1951-1 female (allotype).

Differs distinctly from all species with prescutellar spot in structure of clypeus and mandibles, and coloration of legs.

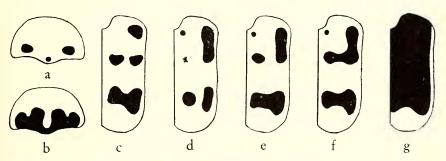


Fig. 1: Melitonoma variolosa sp. n., pattern of upperside

Melitonoma bechuanensis L. Medvedev, sp. nov.

Body black, basal joints of antennae, prothorax, elytra, tibiae and tarsi reddish fulvous, elytra with five more or less rounded black spots (1,2,2).

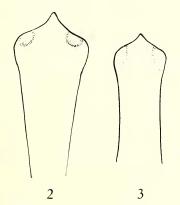


Fig. 2–3: Aedeagus, ventral view, 2. Melitonoma variolosa sp. n., 3. M. bechuanensis sp. n.

Without distinct sexual dimorphism. Clypeus and vertex punctured, frons pubescent, coarsely punctured and longitudinally strigose. Anterior margin of clypeus not broad in male, roundly emarginate. Mandibles simple, short and broad. Prothorax shining, very finely punctured. Elytra shining,

finely punctured, especially at apical declivity. Fore legs of male not elongate, tibia as long as femur, tarsi short, about two third of the length of tibia, first joint elongate triangular, second joint triangular, very short. Aedeagusfig. 3, its ventral surface shining with shagreened apical part and rather weak lateral elevations before apex. Length of body: male-4 mm, female-4,2 mm.

Bechuanaland, Tessebe, XII. 1955, leg. Zumpt-I male-holotype and I female-allotype.

This species must be placed near M. litigiosa Lac., M. bomaensis Jac. and M. inconspicua Har, but differs well in having different form of aedeagus.

Smaragdina schereri L. Medvedev, sp. nov.

Body black, prothorax fulvous with black central longitudinal stripe narrowed on both ends, elytra fulvous, often with narrow black stripe on suture shortened on apical declivity; four basal joints of antennae and all femora, except extreme apex, reddish fulvous.

Head sparsely punctured anteriorly, almost smooth posteriorly, with central round fovea between eyes; frons almost twice as wide as transverse diameter of eye. Anterior margin of clypeus with rounded or trapezioidal emargination. Antennae short, not reaching the base of prothorax, the third segment thin and cylindrical, as long as the second, the fourth triangular but not distinctly widened, the fifth to the tenth strongly widened, the eleventh ellyptical. Prothorax distinctly narrowed anteriorly, with distinct fore and hind angles; surface nitid, very finely and sparsely punctured except a few strong punctures near anterior and posterior margins. Scutellum broadly truncate at apex. Elytra slightly widened posteriorly, finely punctured. Length of body 4,5–5,5 mm.

Tanganyika, Saõ Hill, I. 1963, E. Haaf leg., 2 females-holotype and paratype;

S. Tanganyika, Rungwe Berge, 2500 m., I. 1963, E. Haaf leg., I female-paratype.

This species is a representative of a large group of species related to S. elongata Jac., but differs well from all species of this group in its peculiar coloration of upperside.

Smaragdina nigriscutis L. Medvedev, sp. nov.

Body flavous, head and prothorax more reddish, 4-11 joints of antennae, vertex, scutellum, small humeral spot, metasternum and middle portion of pygidium black or pitchy, sometimes apical half of scutellum flavous or pygidium without black coloration.

Head finely punctured, more distinct on frons, with three weak grooves placed triangularly and sparse pubescent, near eyes. Antennae short, the second joint subglobular, a little longer than broad, the third very small and thin, the following strongly serrate, triangular. Prothorax shining and impunctured except a few strong punctures near base, with broadly rounded hind angles.

Scutellum triangular, truncate at apex, finely punctured. Elytra with rather strong confused punctures, which are obliterated behind apical declivity. Epipleural lobes of elytra weak. Pygidium not exposed, truncate at apex.

Length of body 4,9-5,7 mm., width 2,8-3,2 mm.

Assam, Kaziranga nördl. Mikir-Hills, Brahmaputra, V. 1961, leg. G. Scherer, 4 females including holotype.

Similar at S. divisa Jac. and S. sikhima Jac., differs well in having scutellum, humeral spot and middle portion of pygidium black and tarsi flavous.

Smaragdina potanini L. Medvedev, sp. nov.

Body metallic green, underside more dark, mandibles, basal joints of antennae, prothorax and legs fulvous, labrum piceous, prothorax usually with a small brown spot before scutellum, apices of tarsi more or less darkened.

Body about 2 times as long as broad, more narrow in males. Clypeus and frons rather densely punctured, frons broad with a deep round fovea in the middle and sparse hairs near eyes; vertex without middle groove, finely and sparsely punctured, eyes of male not enlarged.

Prothorax twice as broad as long, finely indistinctly punctured except a few more large punctures near base. Elytra with moderately strong punctures (as in *S. flavicollis* Chevr.), their interspaces flat, shining, extremely finely punctured; apices of elytra more finely punctured and bear short sparse hairs.

Length of body 4,9-5,4 mm. in males, 5,7-6,6 mm. in females.

Aedeagus identical with S. cyanea F.

China: Szechuan, Da-dzjan-lu, V. 1893, leg., G. Potanin, holotype (male), allotype and 2 paratypes.*)

West Szechuan, Sankiangkou, Balang, VII.-VIII. 1934, leg., Friedrich, 6 paratypes;

West Szechuan, Sankiangkou, Lundai, VII. 1934, 2000 m., Wassuland, leg. Friedrich, 1 paratype.

USSR: Ussurigebiet, Ussurijsk, V. 1956, leg. L. Medvedev, I paratype.*)

This species must be included in the group of species near *S. cyanea* F. with flavous prothorax and metallic elytra. It differs from *S. moutoni* Pic and *S. semiaurantica* Frm. in having labrum and clypeus dark, from *S. cyanea* F., *S. flavicollis* Chevr. and *S. graeca* Lef. with unicolorous flavous legs and from *S. discolor* Sols. with not enlarged eyes and rather broad frons of male.

Barybaenella L. Medvedev, gen. nov.

Upperside glabrous, underside pubescent. Head small, distinctly more narrow as compared with prothorax. Clypeus simple, with slightly notched anterior margin. Mandibles short, triangular. Eyes elongate ovate, not very large, distinctly incised on inner margin. Genae distinct, about half the length of eye. Antennae (fig. 4) short, don't reach the base of prothorax, the first joint strongly swollen, subquadrate; the second and the third very short, the fourth to the tenth triangular, the eleventh ovate.

Prothorax transvere, evenly convex without any depressions except usual basal line, all angles distinct, bear a seta. Anterior margin almost straight, basal margin straight, with short and broad basal lobe, lateral margin not explanate. Anterior part of mesonotum (hidden under prothorax) with triangular transversely striate lateral parts, delimited from roughly punctured middle part with impressed line (fig. 5). Scutellum triangular, narrowly truncate at apex. Elytra parallel. Prosternum without distinct proepisternal suture, narrow before coxes, with rather narrow, prosternal process, but visible between coxes, hind margin of prosternum is shown on fig. 6; propleurae smooth, without pubescence. Pygidium not exposed. Fore legs elongate, their femora long and thickened, tibiae straight, a little longer

^{*)} Material from Zoological Institute (Leningrad).

as compared with femora, without apical tooth, tarsi long, their first segment as long as the second and the third together. Aedeagus with bilobed apex.

This genus is near *Barybaena* Lac., but differs well in having lateral margin of prothorax not explanate, prosternal process more wide, but not elevated, fore tibiae of male straight and without apical tooth, aedeagus bilobed etc.

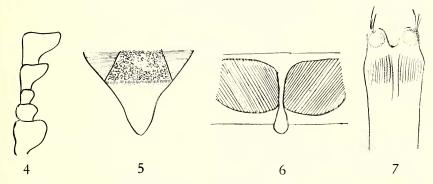


Fig. 4-7: Barybaenella glabrata sp. n., 4. 1-5 joints of antennae, 5. mesonotum and scutellum, 6. middle part of prosternum with prosternal process, 7. aedeagus, ventral view

Barybaenella glabrata L. Medvedev, sp. nov.

Black, 3 basal joints of antennae, small spot above eyes and prothorax including propleurae reddish, elytra flavous.

Head shining, clypeus sparsely, frons densely and coarsely punctured and transversely impressed between eyes, vertex finely and sparsely punctured. Prothorax strongly convex, especially in anterior half, shining, impunctate. Scutellum triangular, with rounded apex, finely punctured. Elytra shining, finely punctured, in irregular rows.

Length of body 5-5,8 mm.

Aedeagus bilobed apically (fig. 7), underside longitudinally strigose before apex and grooved on each lobe.

Tanganyika, Sao Hill, I. 1963, leg. E. Haaf, 2 males-holotype and paratype.

Trignatha L. Medvedev, gen. nov.

Head as broad (male) or a little narrower (female) as prothorax, clypeus of male with very deep and narrow oblique emargination, its right lobe very

long, oblique, bifurcate at apex, mandible-like in form, covers the space between mandibles; left lobe comparatively short, tooth-like (fig. 8). Frons very broad, eyes small, almost round, without an incisure on innerside, their diameter about twice as large as the depth of left genae, a little larger as compared with the right gena. Antennae very short, not extended to the base of prothorax, with the first joint subcylindrical, joints 4–11 serrate. Prothorax short, with all angles broadly rounded. Elytra 3,5 times as long as prothorax. Fore legs of male elongate, fore tarsi narrow and very elongate with the third joint cylindrical (fig. 9).

This genus is rather close to *Coptocephala* and allied genera, but differs well in the extraordinal structure of clypeus in males.

Generotype - Damia capitata Jac.

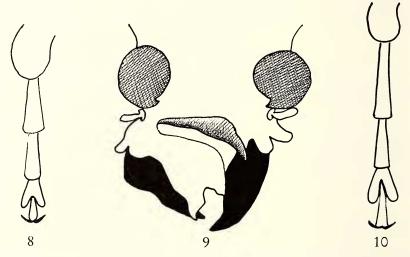


Fig. 8-10: Trignatha capitata Jac., 8. fore tarsus of male. 9. clypeus and mandibles of male, 10. Coptocephala bechynei sp. n., fore tarsus of male

Coptocephala bechynei L. Medvedev, sp. nov.

d: Upperside blue, underside blackish blue, mandibles, labrum and three basal joints of antennae fulvous or reddish-fulvous.

Head as broad as anterior margin of prothorax, mandibles triangular with pointed apex, labrum very large, as long as the rest part of head, widened anteriorly, with almost straight anterior margin. Clypeus with rather short lateral processes and vertical middle part. Genae large and rectangular. Frons densely punctured, with deep central fovea, vertex swol-

len, finely punctured. Antennae short, not reaching the base of prothorax, first joint strongly swollen, almost equal to second and third together. Prothorax strongly transverse, a little narrowed anteriorly and posteriorly, surface very densely punctured throughout with coarse and fine punctures. Elytra densely and coarsely punctured, intersticies finely punctured. Fore legs very elongate, tibiae twice as long as prothorax, moderately curved, tarsi as long as tibiae, the first and the second joints very elongate (fig. 10). Aedeagus with triangular pointed apex, without depressions on underside before apex. Length of body 3,2–3,7 mm.

Q: Differs in having head and fore legs of usual size and structure. Length of body 3–3,5 mm.

Nigeria, Jos on central plateau, 1500–2000 m., 2. X. 1955, 1 maleholotype. 7. X. 1955, allotype and 5 paratypes. Leg. Dr. J. Bechyne.

This species forms a natural group together with Coptocephala cyanea Burg., C. minor Burg. and C. coerulea Bryant (described as Atelechira). It is similar with C. coerulea Bryant in structure of clypeus, but differs well in the densely punctured prothorax and the absence of impressions on underside of aedeagus. From C. minor Burg. and C. cyanea Burg. the new species may be separated in having short lateral processes of clypeus and densely punctured prothorax.

B. Notes on the system of the aethiopian genera of Clytrinae.

The system of Clytrinae is quite unsatisfactory, no attempts for its revision had been made since 1906, when the work of Jacoby and Clavareau was published. The study of a lot of material of African Clytrinae allows me to mark natural groups of genera. One of these groups includes genera with wholly or partly, but always distinctly pubescent probleura. The revision of this group is given below.

Key for aethiopian genera with pubescent propleura.

- 1 (4) Epipleuron with long erect hairs, which are longer than the maximal width of epipleuron.
- 2 (3) Upperside (except prothorax) and propleura with adpressed hairs. Antennae serrate from the fourth joint. Eyes ovate, their greatest diameter almost twice as large as length of gena. Type: O. hirta L. Medv.
 Otjosondia L. Medv.
- 3 (2) The whole body with long erect hairs. Antennae serrate from the

- fifth joint. Eyes small, round, their diameter distinctly less than the length of gena. Type: C. equestris Dalm.

 Crabronites Lac.
- 4 (1) Epipleuron bare or with a few short hairs along inner margin.
- 5 (18) Fore legs of male elongate and distinctly more long as compared with middle or hind legs; fore tibiae usually curved. Sexual dimorphism distinct. Eyes round or ovate, mostly as long as gena.
- 6 (7) Fore femora strongly dilated in male, distinctly more thick as compared with the middle ones.
- 7 (8) Anterior margin of elytra strongly rised in the middle part. Fourth joint of antennae distinctly triangular, very similar to the fifth. Prothorax pubescent. Type: T. nitidicollis Lac. Teinocera Lac.
- 8 (7) Anterior margin of elytra moderately rised along all its length. Fourth joint of antennae elongate, indistinctly triangular, 1,5 times as long as fifth joint. Prothorax bare. Type: S. virginea Lac.

Smeia Lac.

- 9 (6) Fore femora not or slightly thickened in male (sometimes all femora rather thick). Type: P. umtaliensis Jac. Protoclytra Wse.
- 10 (15) Prothorax pubescent.
- 11 (12) Elytra coarsely punctured. Fore tibiae of males with apical tooth.

 Type: H. baculus Lac. Subg. Hirtolenes, nov.
- 12 (11) Elytra finely or indistinctly punctured.
- 13 (14) Lateral margin of prothorax rounded, not explanate. Fore tibiae with apical tooth in male. Fore tarsi strongly elongate in male, first tarsal joint not less than 4 times as long as broad. Femora slightly thickened. Type: C. marginata Ol. Subg. Camptomima, nov.
- 14 (13) Lateral margins of prothorax almost straight, explanate and sharp. Fore tibiae without apical tooth. Fore tarsi scarcely elongate in male, first tarsal joint about 2 times as long as broad. All femora distinctly thickened. Type: C. brevitarsis Jac. Subg. Paralenes, nov.
- 15 (10) Prothorax not pubescent.
- 16 (17) Prothorax with deep transverse grooves or impressions before middle. Elytra without distinct longitudinal ridges before apices. Fore tibiae without apical tooth. Coloration usually more or less metallic. Type: L. fastuosa Lac. Subg. Lacordairella Monros
- 17 (16) Prothorax without impressions or they are feeble. Elytra with distinct longitudinal ridges before apices. Fore tibiae often with apical

- tooth in males. Coloration without metallic lustre. Type: P. umtaliensis Jac. Subg. Protoclytra Wse.
- 18 (5) Fore legs of male not elongate, fore tibiae usually straight. Without noticeable sexual dimorphism. Eyes elongate-ovate, not less than twice as long as genae.
- 19 (20) Sharp ridge of anterior elytral margin reaches the apex of scutel-tum. Prothorax with deep impressions. With feeble sexual dimorphism. Type: *P. nigrofasciata* Lac. **Pseudolachnaia** gen. nov.
- 20 (19) Sharp ridge of anterior elytral margin disappears already before base of scutellum. Prothorax usually without deep depressions. Without distinct sexual dimorphism.

Type: C. quadripunctata Laich.

Clytra (pars)

Hirtolenes L. Medvedev, subg. nov.

Antennae strongly serrate from the fourth joint, first joint short and broad. Space between antennal insertion almost as broad as between eyes. Lateral margins of prothorax not expanded, its surface with rather long adpressed hairs. Elytra coarsely punctured but without distinct longitudinal ridges in apical part. Fore legs of male very long, tibiae curved, with apical tooth, tarsi very long and slender, more long as compared with tibiae.

Generotype: Atelechira baculus Lac.

Camptomima L. Medvedev, subg. nov.

Similar at preceeding, differs in having elytral punctures feeble, especially at apex, and fore tarsi of male moderately elongate, about two thirds of the length of tibiae. Pubescence of prothorax long or short, but always adpressed.

Generotype: Camptolenes marginata Ol.

Paralenes L. Medvedev, subg. nov.

Antennae moderately serrate from the fourth joint, first joint elongate. Space between antennal insertion about half as broad as between eyes. Prothorax with adpressed pubescence, its lateral margin expanded, thin and sharp. Elytra finely punctured. Propleurae bare in the middle part. Fore legs of male moderately elongate, tibiae as long as femora, without apical tooth, tarsi short and broad with more or less triangular joints.

Generotype: C. brevitarsis Jac.

Pseudolachnaia L. Medvedev, gen. nov.

Body large, cylindrical. Head and underside including proepipleura pubescent. Eyes ovate, their greatest diameter twice as large as a length of gena. The first joint of antennae quadrate, the second and the third small, the fourth and following ones serrate.

Prothorax bare, its surface uneven, with transverse impression on each side near middle; all angles broadly rounded. Anterior margin of elytra with a sharp ridge, which almost reaches the apex of scutellum. Epipleuron narrow, gradually narrowing posteriorly. Prosternum narrow but distinct between coxal cavities. Legs simple in both sexes.

Sexual dimorphism rather feeble: head of male a little larger and mandibles more developed as compared with female.

Generotype: Lachnaia nigrofasciata Lac.

This genus seems to be a transitional one between Protoclytra and Clytra.

Catalogue of the aethiopian genera of Clytrinae with pubescent propleurae

Otjosondia L. Medv.

hirta L. Medv.

proxima Pic rufithorax Pic quinquemaculata Pic

Teinocera Lac.

marginata Pic

(= Lophobasis Lac., syn. nov.)

overlaeti Jol.

nitidicollis Lac. aeneicollis Lac.

(pretoriae Jac.)

subclathrata Lac.

(subconvexa Pic)

(natalensis Jac.)*)

Subg. Lacordairella Monros

(= Camptolenes Lac., nec Chevr.) fastuosa Lac.

Crabronites Lac. equestris Dalm.

thoracica Jac.

Protoclytra Wse.

seydeli Burg. (bryanti Jol.)

Subg. Protoclytra s. str.

(bifasciata Bryant)

^{*)} Species in brackets are unknown for me and their real place in system is not quite clear.

abyssinica Lef.

ssp. umtaliensis Jac.

salaamensis Wse.

rugosa Jac. (= proxima Per., syn. nov.)

raffrayi Lef.

pubifrons Jac.

vreuricki Burg.

burgeoni Jol.

diversinotata Pic

Subg. Camptomima, nov.

marginata Ol.

marshalli Jac.

Subg. Paralenes, nov.

brevitarsis Jac.

Species exclusae

fairmairei Lef. > Tituboea

cingulata Lef. > Tituboea

katangana Burg. > Miopristis

(opacula Frm.)

Subg. Hirtolenes, nov.

baculus Lac. (ex Atelechira)

fulvicollis Jac.

cribraria Lac.

weiseana L. Medv.

forcipata Burg.

ines Jol.

Pseudolachnaia, gen. nov.

nigrofasciata Lac. (ex Lachnaia)

impressicollis Jac. (ex Clytra)

Clytra Laich.

Aethiopian species of this genus are very heterogeneous and must be divided in a few subgenera or genera, but their study is not completed at time.